

Kemfloor VC

Heavy Duty Abrasion and Impact Resistant Floor Topping Non Metallic Monolithic Floor Hardener

Description	Kemfloor VC is a one component floor screed based on special cement, hard wearing graded aggregates, mineral additives and admixtures. When mixed with water, it produces a micro-concrete ready to be laid over old concrete floors after surface preparation in one application. After hardening, the surface may be grinded to expose the aggregates and obtain a smooth, shiny and easy to clean surface. It complies with BS EN13813, 1097-5
Where to use	Kemfloor VC provides an extremely durable, seamless, high strength, impact, scratching and abrasion resistant floor which can be applied with a minimum thickness of 8 mm, with no maximum limit. Kemfloor VC is ideally suitable either where the floor is subjected to severe conditions of service, or where a luxury floor is required. Kemfloor VC is supplied in different colors enabling decorative designs to be applied. Kemfloor VC can be used indoor and/or outdoor.
Advantages	•Non-shrink. •High early strength with long term strength gain. •Waterproof. •Outstanding abrasion and scratch resistance. •Characteristics improvement over 10 years. •Resists alkalis and acids of PH as low as 4. •Resists carbonation providing excellent protection for steel reinforcement. •Formulated for short and long term efficiency. •Excellent adhesion. •Continuous pores filling and sealing provided by the slow hydration of Di-calcium Silicate (C2S). •No free lime, all the hydration products are solids.
Properties	
Toxicity	Non-toxic
Setting Time	1 hour at 20 °C
Fresh Density	2.26 Kg/liter
Adhesion	> 10 Kg/cm
Compressive Strength	35-40 N/mm ² After 28 days
Flexural Strength	6-8 N/mm ²
Impact Resistance	Category A
Moisture Content	1.9 % After 3 days
Color	Grey, brick red and black.
Surface Preparation	•A good floor topping is only as good as the preparation. •In order that maximum bond strength is achieved between the substrate and the floor topping, all concrete substrates should be sound, clean and free from laitance, dust, loose particles, grease, oil or any other foreign matter. •All concrete surface defects (Honey combs, Rock pockets, air voidsetc.) should be repaired following a proper repair procedure, using Vicalpes mortar having the following proportions by volume one part Vicalpes cement to one-part siliceous graded sand, water is to be added to the dry mix while mixing with gloved hands to a mastic consistency. •Before applying Kemfloor VC, all surfaces should be saturated with water with no running water (saturated surface dry). •For better adhesion, Kemfloor VC may be applied over a wet coat of Kemseal VC

Mixing	• Add 4.0 – 4.5 liters of water to one Kemfloor VC 25 Kg bag. • Mechanical mixing is essential for a rapid and homogeneous mix. • Forced action mixers or free fall mortar mixers are suitable. • Either the powder or the water may be introduced first in the mixer, for best results introduce half of the water then all the powder then the remaining water quantity.
Application	• Kemfloor VC will be laid on the prepared surfaces in one application by screeding. • No joints are needed but those in the original floor should be respected in the topping. • Screeding (straight edging the surface), has the greatest effect on the surface tolerances. It should be performed over well leveled screed guides using straightedges specially made for this purpose including hollow magnesium straightedges. • Temporary screed guides can be lumber, T bars ...etc. which should be removed after the screed hardening. • Permanent screed guides include metallic strips and 10 cm width or more strips made from the same material with different colors, which will remain as a part of the screed. • Permanent screed guides allow decorative designs or floor marking. • Even surfaces can be obtained by proper straight edging prior to smoothing by mechanical grinding. (Diamond-disk grinders are much faster than stone grinders and give better results). • Where mechanical grinding is not requested, smoothing by hand troweling can be done provided the distance between the screed guides are limited to 1.20 m in order to minimize depressions. • Curing is very important at least during the first three days. It can be done by the use of water means or by the use of a suitable curing compound.
Precaution	Protect the Kemfloor VC bags from direct sun rays or any other source of heat before use, this can lead to very fast setting. • Avoid working on hot substrates. • After application, Kemfloor VC should be allowed to cure for at least 7 days before mechanical grinding.
Theoretical Coverage	After mixing with water, the 25 Kg pack yields about 12.80 liters of micro-concrete covering 1.28 m ² of 10 mm thickness Allowance should be made for any possible wastage when estimating.
Packaging	25 Kg Sack
Shelf life & Storage	Kemfloor VC has a shelf life of 6 months if stored in normal temperature and closed shaded dry area in unopened original packing.
Health and Safety	Use goggles, gloves and a breathing mask when applying. Apply forced ventilation in confined spaces.
Additional Information	PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure. PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range. For our customer's satisfaction. PROKEM reserves the right to change the properties of its products. All orders are accepted subject to our current term of sale & delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request. PROKEM extends technical services to include after sales support to assist users in a proper handling of our product.